

# Treatise Concerning the Physical Dynamics Supporting Quantum Entanglement

14 August 2025

Simon Edwards

Research Acceleration Initiative

## Introduction

Although the phenomenon of quantum entanglement and the possibility of being able to convey information through unseen links through an additional dimension are now broadly accepted, it is poorly understood. This author does not find it sufficient to simply accept that two atoms can be linked by nothing. Surely, if exerting an influence on one atom results in a change to another, they are connected. The purpose of this paper is to propose an explanation for that connection which is grounded in Newtonian Physics.

## Abstract

Taking into consideration that electromagnetism can be used to entangle two atoms, I propose that, in conjunction with my previous writings on the concept that matter has variable “temporal breadth” depending upon its composition (ibid.,) atoms may enjoy increased temporal breadth on a transient basis when two atoms interact with an EM wave simultaneously. Existing literature about entanglement seems to hint that entanglement is achieved by passing light through one atom situated *behind* another relative to a light source, but this seems not to be true. If two atoms which, despite being physically separate are at a precisely equal distance from an EM source and the EM wave strikes both atoms at the same time, the wave may act as a bridge between those atoms capable of translating spin torque through the conventional force of magnetism in the same way in which a Newton’s Cradle translates kinetic force without requiring the force translators to move.

As I’ve described in previous publications, magnetic fields can have the effect of conveying Higgs Bosons, thereby increasing mass relative to the innate carrying capacity of atoms for mass carriers (determined by the number of protons and neutrons.) When mass exceeds the natural state due to artificial amplification, the result is a widened temporal footprint. Although this author’s own thinking on the matter of entanglement has previously assumed a fifth spatial dimension, I am now rescinding that suggestion and am instead suggesting that the entanglements are temporal (i.e. of or pertaining to the fourth spatial dimension) and that a fifth spatial dimension is not required to explain the phenomenon.

If the temporal footprint of both atoms in question is widened to encompass a wide range of points in fourth-dimensional space and the EM wave acts as a bridge which can translate magnetic force between points in readily-observable three-dimensional space, a change made to one atom, even in the future, would be translated to all points in the fourth dimensional aspect of the existence of the atom. If, at any point in that existence, a bridge exists between atoms in three dimensions (as it does at the instant of entanglement) the force would, remarkably, be translated to the second atom through that

bridge. This translation of force would be able to cross a boundary of time due to the transiently amplified temporal footprint of the primary atom, itself, but would be able to cross a boundary of space (in the conventional sense) because of the EM wave used to entangle it.

Thus, there is a tangible, Newtonian force being translated in order to bring about alterations to the spin state of electrons of entangled atoms. The EM wave serves both to increase the temporal breadth of both atoms in the fourth dimension and to act as a range-extender for translating the discrete magnetism exerted by an electron in the entangled atom. *The entire phenomenon can be explained by atoms which occupy a range of time-periods at a time and by the translation of magnetic force along a curved EM wavefront over comparatively short distances associated with the initial entanglement.*

The most remarkable thing about this phenomenon is that when we successfully entangle two atoms and change the state of the secondary atom using the primary atom as a kind of telegraph key, we are not changing the spin state of an electron in the present, but are changing it in the past, at the moment in time that it was entangled in the first place. No matter what combination of left or right torques are applied to the electron in question between the time of entanglement and the present time, if we add a left or right torque to the electron in the past, the cumulative total of left and right torques will always amount to a perceptible change in the present spin state.

Because the atoms are isolated from other atoms, this does not create a causal paradox.

Armed with this understanding, we can infer, furthermore than disentanglement is the result of new entanglements being established with other atoms which are nearer in the temporal dimension. A spin torque effect cannot be translated, except under special conditions, to more than one atom from a single atom due to the principle of conservation of energy. Thus, if a primary entangled atom becomes linked to some other atom due to a loss of containment, any force translated would be exerted against that atom instead of the original atom. This is the nature of disentanglement. It's less like severing a wire and more like one person wedging themselves forcefully between two people trying to have a conversation. The force would be absorbed by the newly entangled atom and would not make it to its intended destination.

However, it may be possible to construct what might be termed a *temporal Newton's Cradle* in which pairs of atoms are entangled strategically by entangling Atom 1 with Atom 2, then Atom 2 with Atom 3, then Atom 3 with Atom 4 et cetera so that an effect can be translated by a single atom to multiple receivers for something more akin to a broadcast functionality than a two-way radio functionality. In either mode of function, communication is made simpler by using separate complexes of entangled atoms for each direction of transmission rather than using entangled atoms for both sending and receiving information, although it should be possible to use a single system in a two-way mode provided that the users never accidentally "step upon" one another by attempting to transmit at the same time or to transmit

without first assessing the initial state of the system. In a two-way mode, both users would have to agree ahead of time to only transmit at prescribed ranges of times. To do otherwise would be to effectively encrypt the intended information and, although it would not break the entanglement, it would render the mechanism useless, necessitating replacement.

## **Conclusion**

This fundamental understanding of precisely what is transpiring in both entanglement and disentanglement is essential for constructing novel technological devices which exploit these effects for communication and other purposes.